out departing from the spirit of the invention and the scope of protection is only limited by the scope of the accompanying claims.

1. A surface-modified particle comprising a particle core and a coating adsorbed to a surface of the particle core, wherein the particle core comprises a small molecule active agents, a peptide active agent or a protein active agent, the coating comprises a surfactant having formula I, and the surface-modified particle has a size from about 10 nm to about 1 μ m, does not comprise polysaccharides, does not comprise colloidal silicon dioxide, and does not comprise monoacylated monoglycerides:

$$\mathbb{R}^{5}$$
O \mathbb{N}^{+} \mathbb{N}^{+} \mathbb{R}^{1} \mathbb{R}^{2} \mathbb{R}^{3}

wherein n and m are 1;

R¹, R², and R³ are methyl; and

R⁴ and R⁵ are independently selected from the group consisting of cis-9-octadecenoyl and cis-9-octadecenyl.

- 2. The particle of claim 1, wherein R⁴ and R⁵ are cis-9-octadecenoyl.
- 3. The particle of claim 1, wherein R⁴ and R⁵ are cis-9-octadecenyl.
- **4**. The particle of claim **1**, wherein the coating further comprises a second surfactant.
- **5**. The particle of claim **4**, wherein the second surfactant is selected from the group consisting of anionic surfactants, cationic surfactants, zwitterionic surfactants, nonionic surfactants, surface active biological modifiers, and combinations thereof.
- 6. The particle of claim 4, wherein the second surfactant comprises at least one of a poloxamer and a phospholipid.
- 7. The particle of claim 1, wherein the active agent is a therapeutic agent.
- 8. The particle of claim 7, wherein the therapeutic agent is selected from the group consisting of analgesics, anesthetics, analeptics, adrenergic agents, adrenergic blocking agents, adrenolytics, adrenocorticoids, adrenomimetics, anticholinergic agents, anticholinesterases, anticonvulsants, alkylating agents, alkaloids, allosteric inhibitors, anabolic steroids, anorexiants, antacids, antidiarrheals, antidotes, antifolics, antipyretics, antirheumatic agents, psychotherapeutic agents, neural blocking agents, anti-inflammatory agents, antihelmintics, antibiotics, anticoagulants, antidepressants, antiepileptics, antifungals, antifibrotic agents, anti-infective agents, anti-parasitic agents, antihistamines, antimuscarinic agents, antimycobacterial agents, antineoplastic agents, antiprotozoal agents, antiviral agents, anxiolytic sedatives, beta-adrenoceptor blocking agents, corticosteroids, cough suppressants, dopaminergics, hemostatics, hematological agents, hypnotics, immunological agents, muscarinics, parasympathomimetics, prostaglandins, radiopharmaceuticals, sedatives, stimulants, sympathomimetics, vitamins, xanthines, growth factors, hormones, antiprion agents, and combinations thereof.
- 9. The particle of claim 1, wherein the active agent is an antineoplastic agent selected from the group consisting of paclitaxel, paclitaxel derivative compounds, alkaloids, antimetabolites, enzyme inhibitors, alkylating agents, and combinations thereof.

- 10. The particle of claim 1, wherein the active agent is paclitaxel; and R4 and R5 are cis-9-octadecenoyl.
- 11. The particle of claim 1, wherein the active agent is paclitaxel; and R^4 and R^5 are cis-9-octadecenyl.
- 12. The particle of claim 1, wherein the active agent is a protease inhibitor.
- 13. The particle of claim 12, wherein the protease inhibitor is selected from the group consisting of indinavir, ritonavir, saquinavir, nelfinavir, and combinations thereof.
- **14**. The particle of claim **1**, wherein the active agent is a nucleoside reverse transcriptase inhibitor.
- 15. The particle of claim 14, wherein the nucleoside reverse transcriptase inhibitor is selected from the group consisting of zidovudine, didanosine, stavudine, zalcitabine, lamivudine and combinations thereof.
- **16**. The particle of claim **1**, wherein the active agent is a non-nucleoside reverse transcriptase inhibitor.
- 17. The particle of claim 16, wherein the non-nucleoside reverse transcriptase inhibitor is selected from the group consisting of efavirenz, nevirapine, delaviradine, and combinations thereof.
- 18. The particle of claim 1, wherein the active agent is an anti-inflammatory agent.
- 19. The particle of claim 18, wherein the anti-inflammatory agent is selected from the group consisting of non-steroidal anti-inflammatory drugs, nonselective cycloxygenase (COX) inhibitors, COX-1 inhibitors, COX-2 inhibitors, lipoxygenase inhibitors, corticosteroids, anti-oxidants, tumor necrosis factor (TNF) inhibitors, and combinations thereof.
- **20**. The particle of claim **1**, wherein the active agent is selected from the group consisting of celecoxib, rofecoxib, valdecoxib, parecoxib, lumiracoxib, etoricoxib, and combinations thereof.
- 21. A pharmaceutical composition comprising a plurality of particles of claim 1.
- 22. The particle of claim 1, wherein the particles are amorphous, semicrystalline, crystalline, or a combination thereof.
- 23. The particle of claim 1, wherein the surface-modified particle is capable of dissolution when taken up by cells or delivered to tissue of a mammalian subject.
- 24. The particle of claim 1, wherein the surface-modified particle includes at least 75% (w/w) active agent.
- 25. A surface-modified particle comprising a particle core and a coating adsorbed to a surface of the particle core, wherein the particle core consists of a peptide active agent, the coating comprises a surfactant having formula I, and the surface-modified particle has a size from about 10 nm to about 1 μ m, does not comprise polysaccharides, does not comprise colloidal silicon dioxide, and does not comprise monoacylated monoglycerides:

$$R^{5}O$$
 $N^{+}R^{1}R^{2}R^{3}$ $N^{+}R^{4}R^{2}R^{3}$

wherein n and m are 1;

R¹, R², and R³ are methyl; and

R⁴ and R⁵ are independently selected from the group consisting of cis-9-octadecenoyl and cis-9-octadecenyl.